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- (71) Applicant (*for all designated States except US*): HENRY FORD HEALTH SYSTEM [US/US]; 1 Ford Place, 4B, Detroit, MI 48202 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (*for US only*): CHOPP, Michael [US/US]; 28415 Brooks Lane, Southfield, MI 48034 (US). ZHANG, Rui, Lan [CN/CN]; 47 Glenshire, Troy, MI 48098 (US).
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(54) Title: NITRIC OXIDE DONORS FOR INDUCING NEUROGENESIS

(57) Abstract: There is provided a method of promoting neurogenesis by administering a therapeutic amount of a nitric oxide donor compound to a patient in need of neurogenesis promotion. Also provided is a compound for providing neurogenesis having an effective amount of a nitric oxide donor sufficient to promote neurogenesis. A nitric oxide compound for promoting neurogenesis is also provided. Further, a method of augmenting the production of brain cells and facilitating cellular structural and receptor changes by administering an effective amount of a nitric oxide donor compound to a site in need of augmentation is provided. There is provided a method of increasing both neurological and cognitive function by administering an effective amount of a nitric oxide donor compound to a patient.

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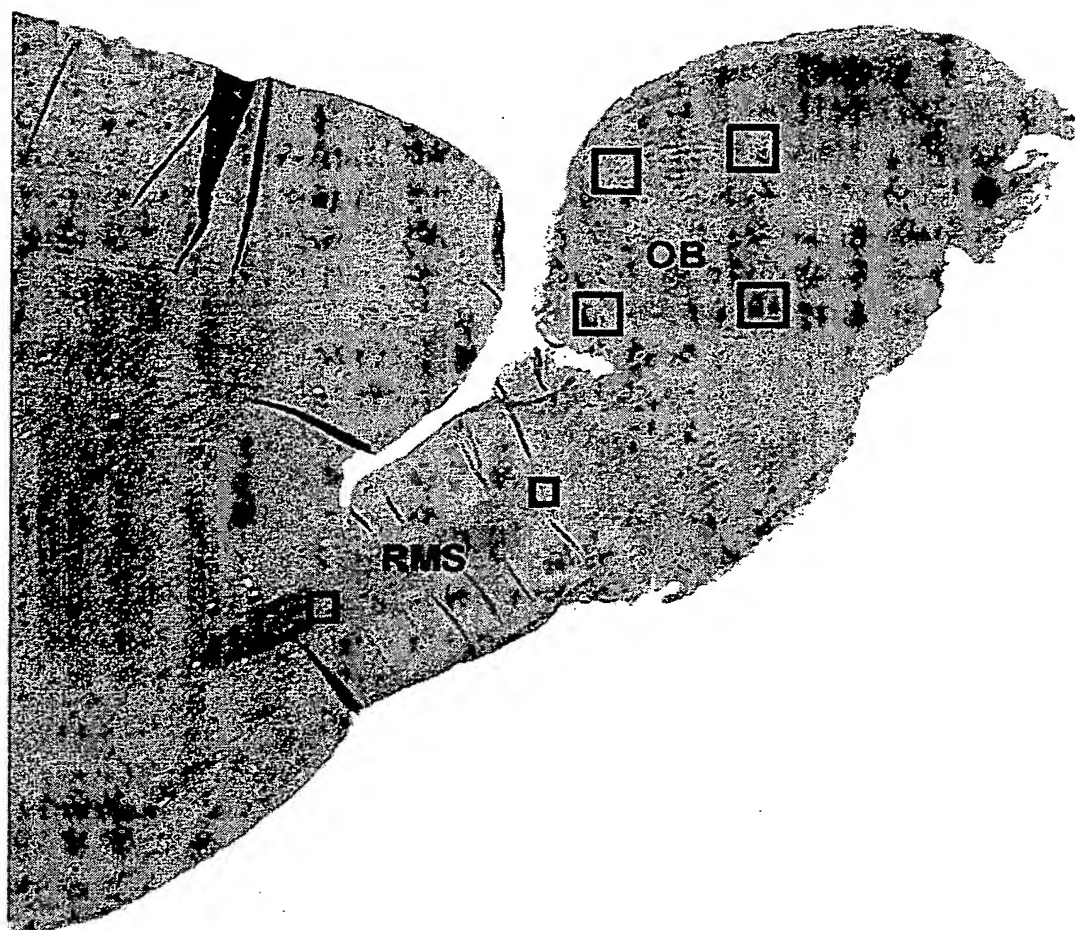
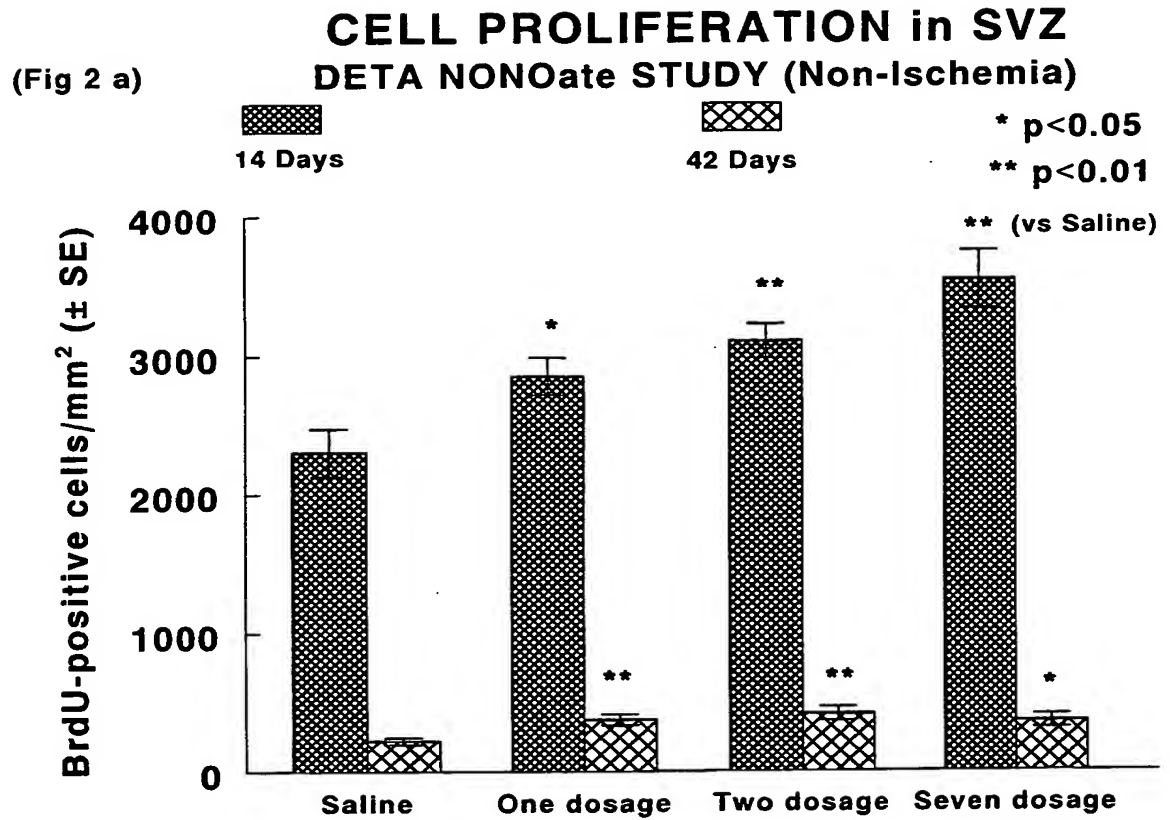
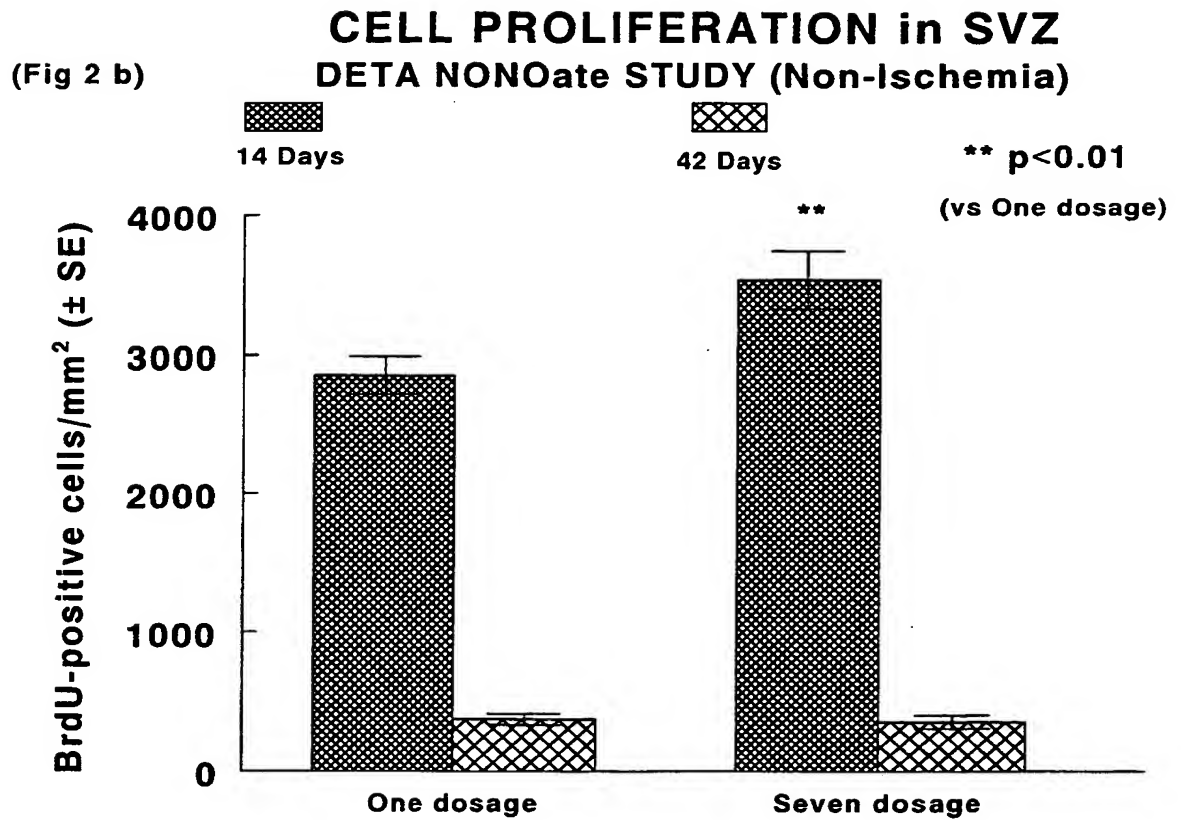
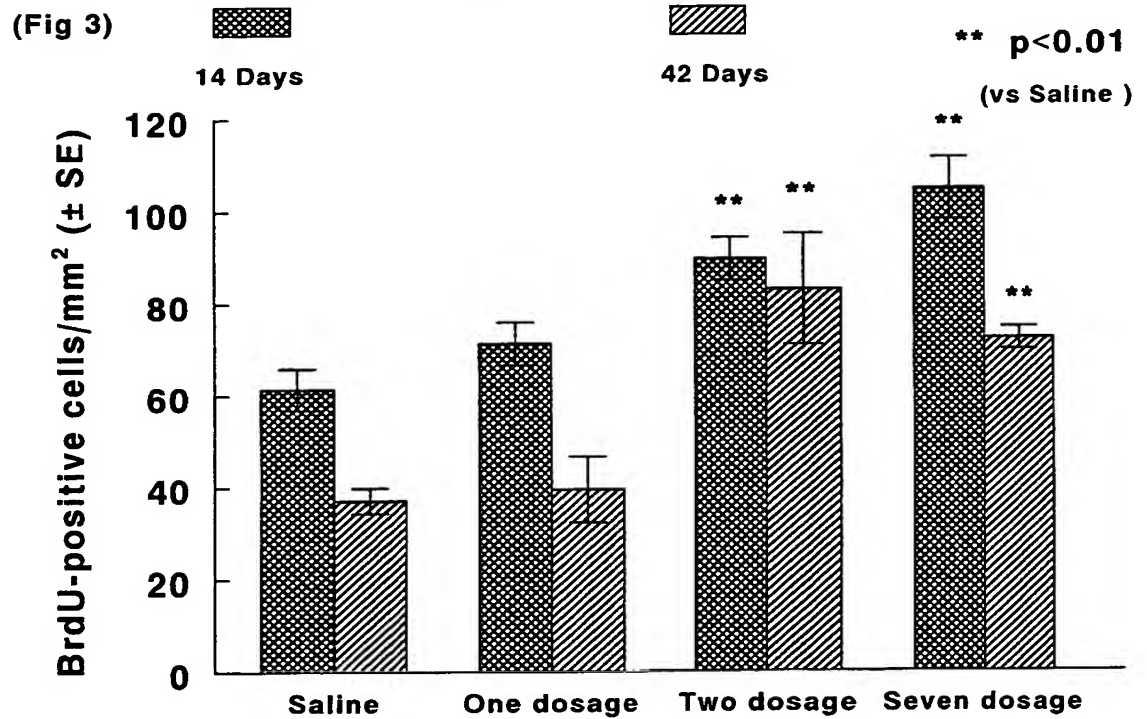


Fig 1.



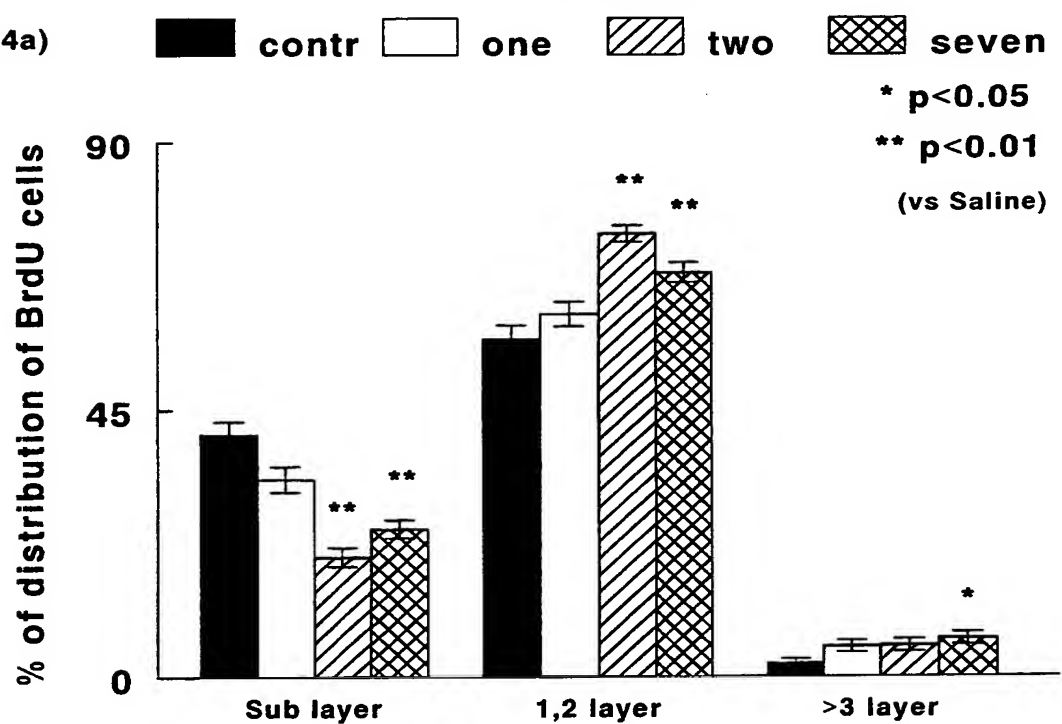


CELL PROLIFERATION in Dentate Gyrus DETA NONOate STUDY (Non-Ischemia)



CELL PROLIFERATION in Dentate Gyrus 14 DAYS

(Fig 4a)



CELL PROLIFERATION in Dentate Gyrus**42 DAYS**

(Fig 4b)

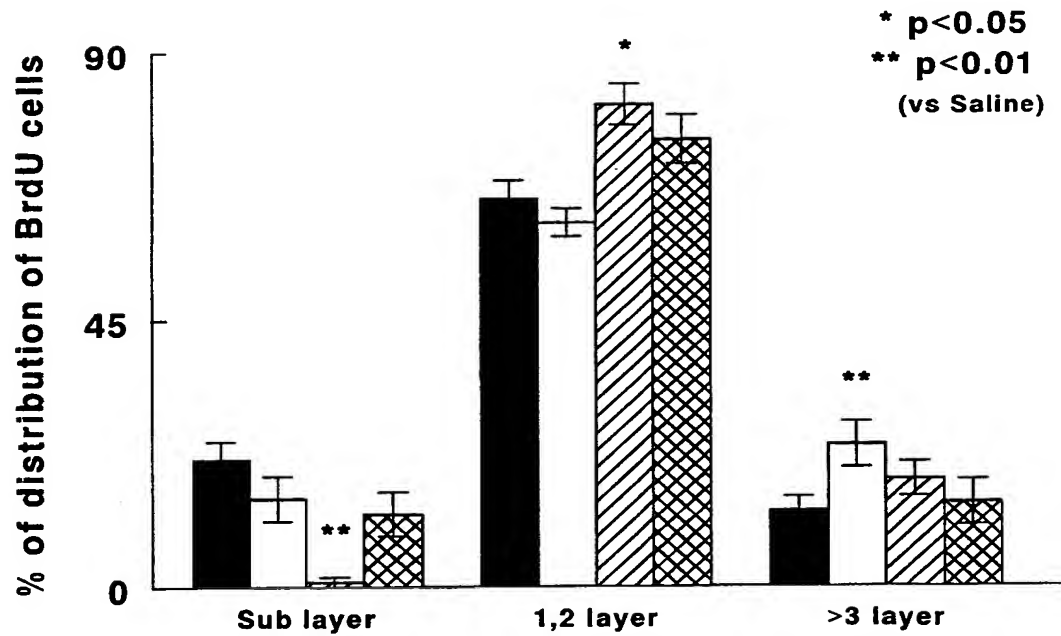
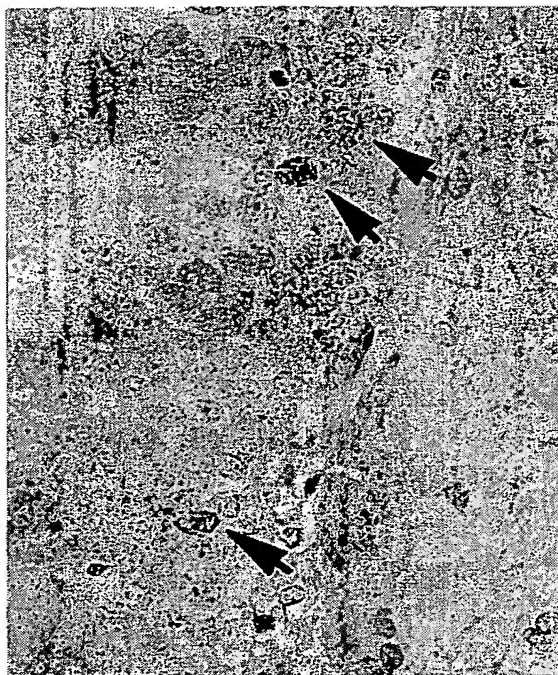
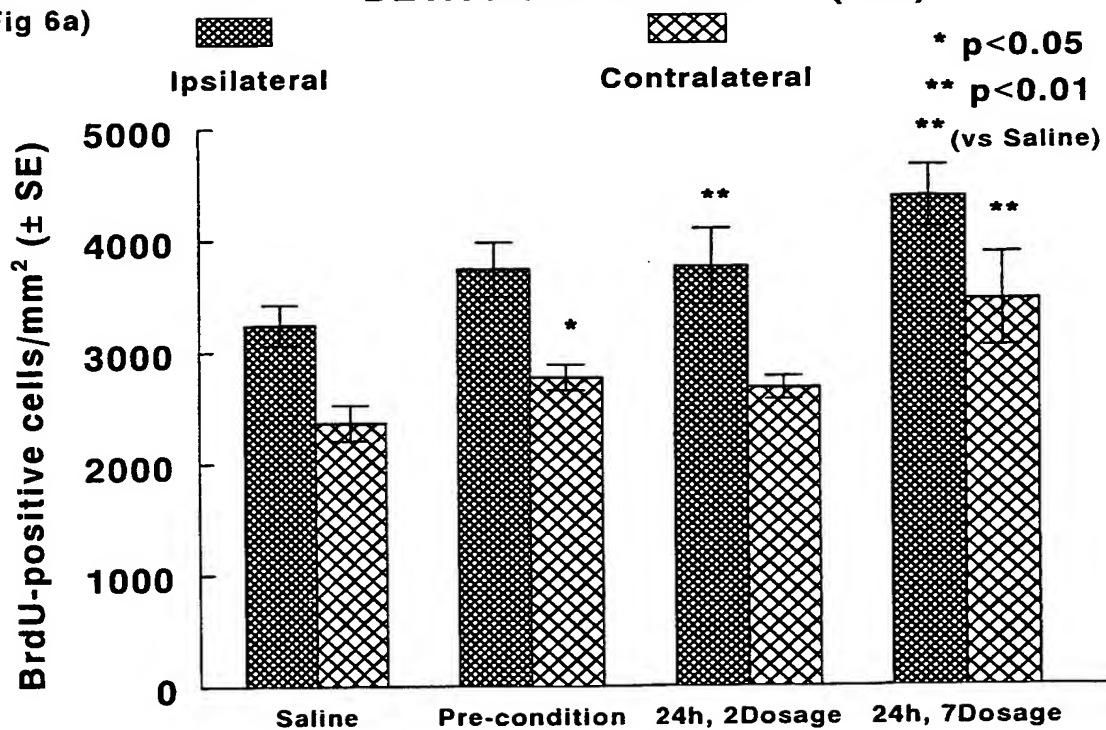
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Fig 5

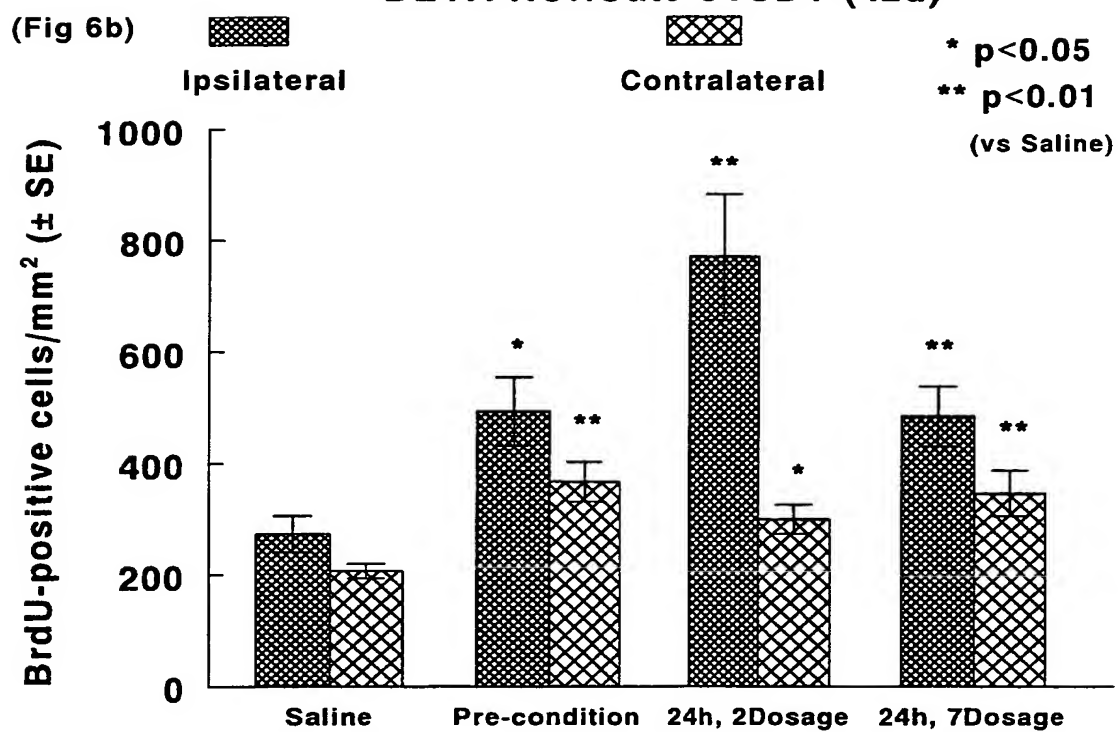


CELL PROLIFERATION in SVZ DETA NONOate STUDY (14d)

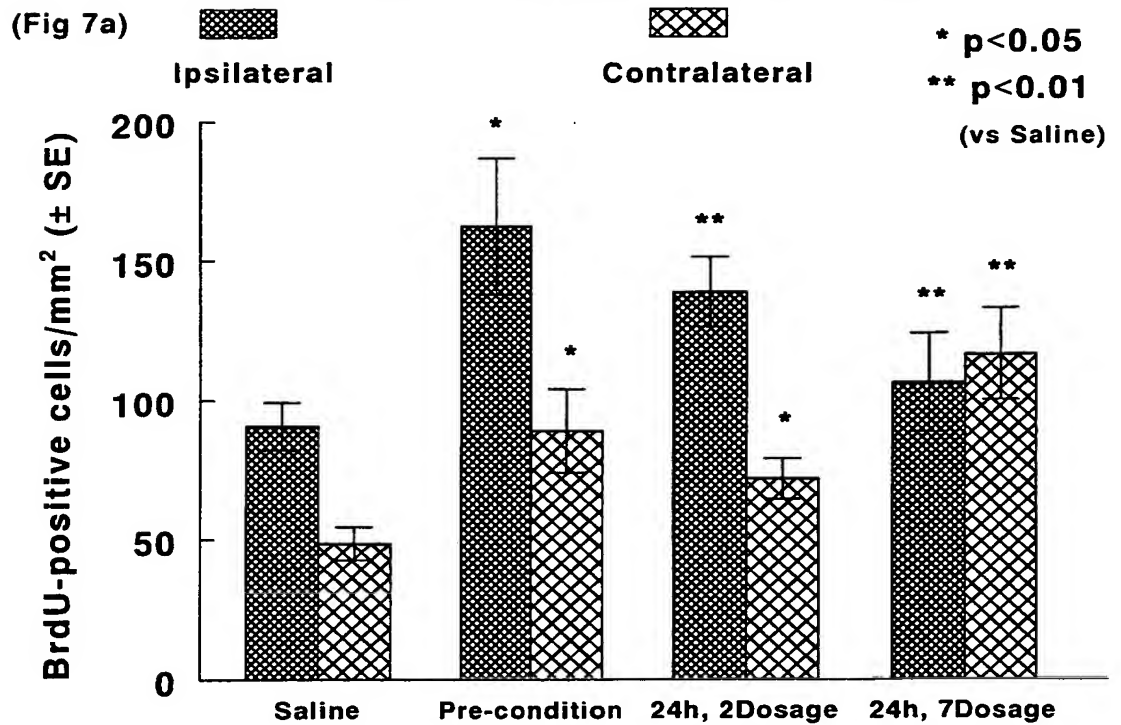
(Fig 6a)



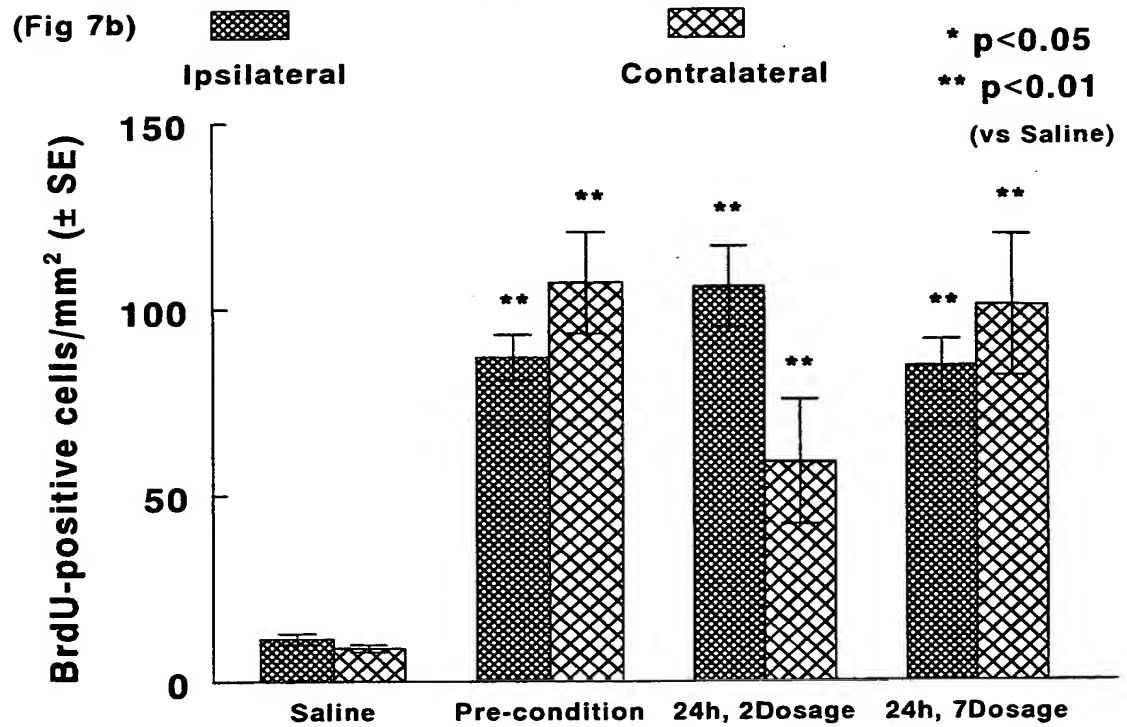
CELL PROLIFERATION in SVZ DETA NONOate STUDY (42d)



CELL PROLIFERATION in OB DETA NONOate STUDY (14d)

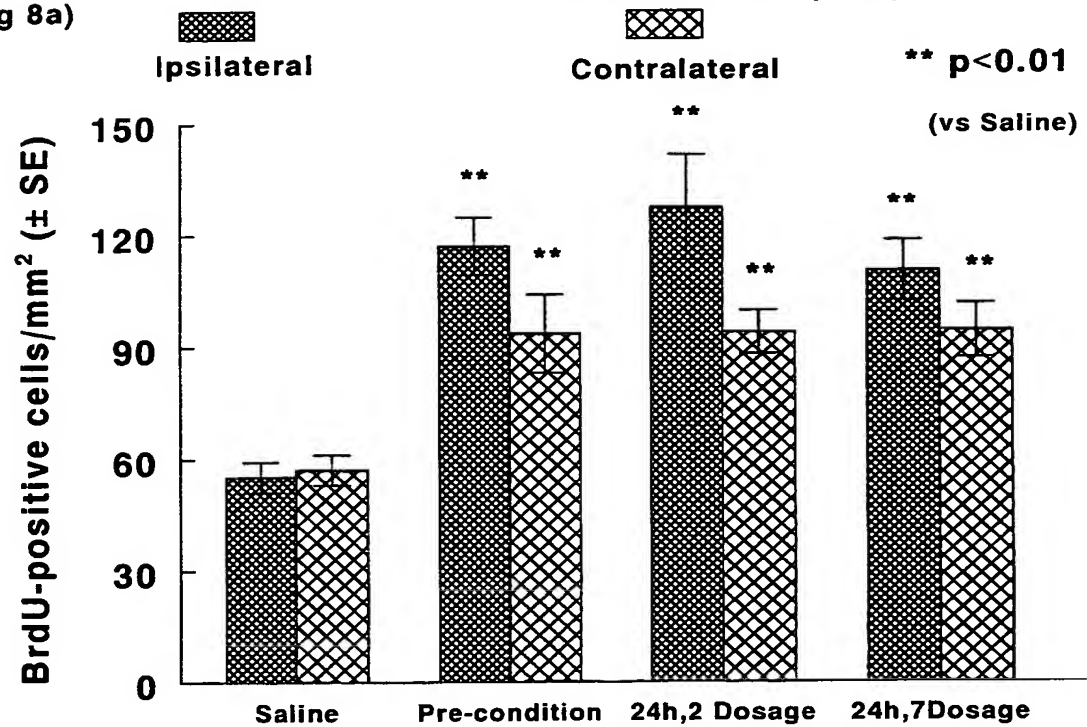


CELL PROLIFERATION in OB DETA NONOate STUDY (42d)

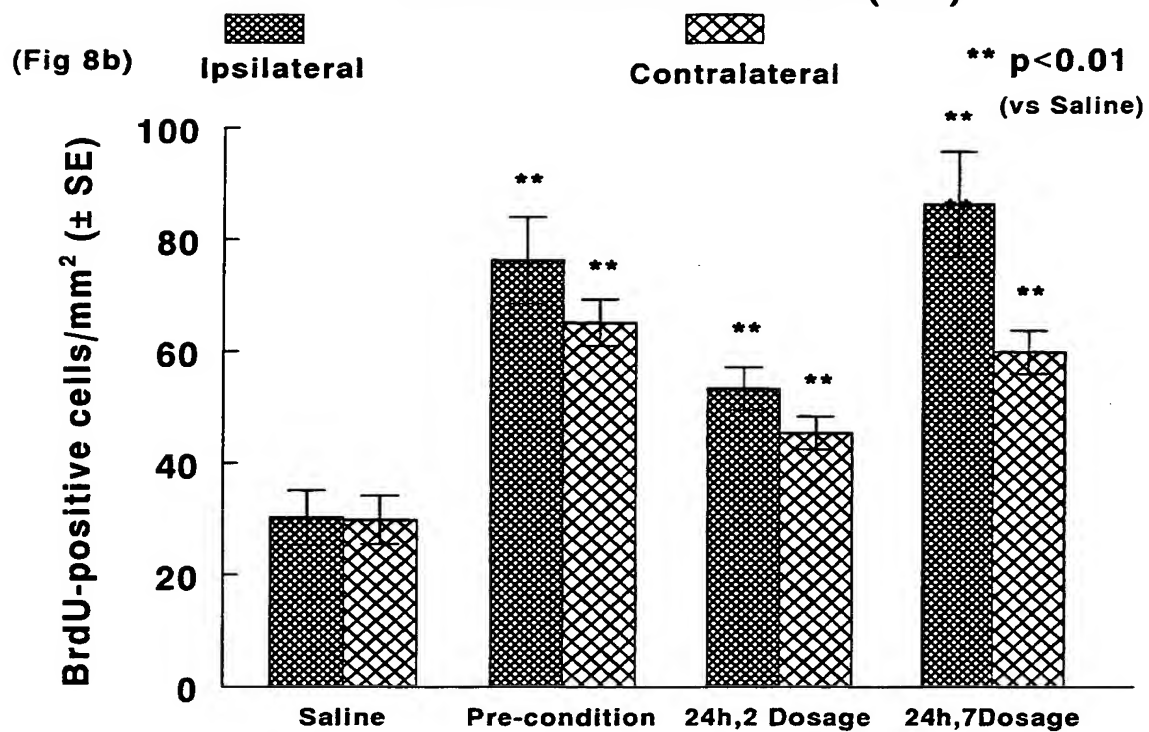


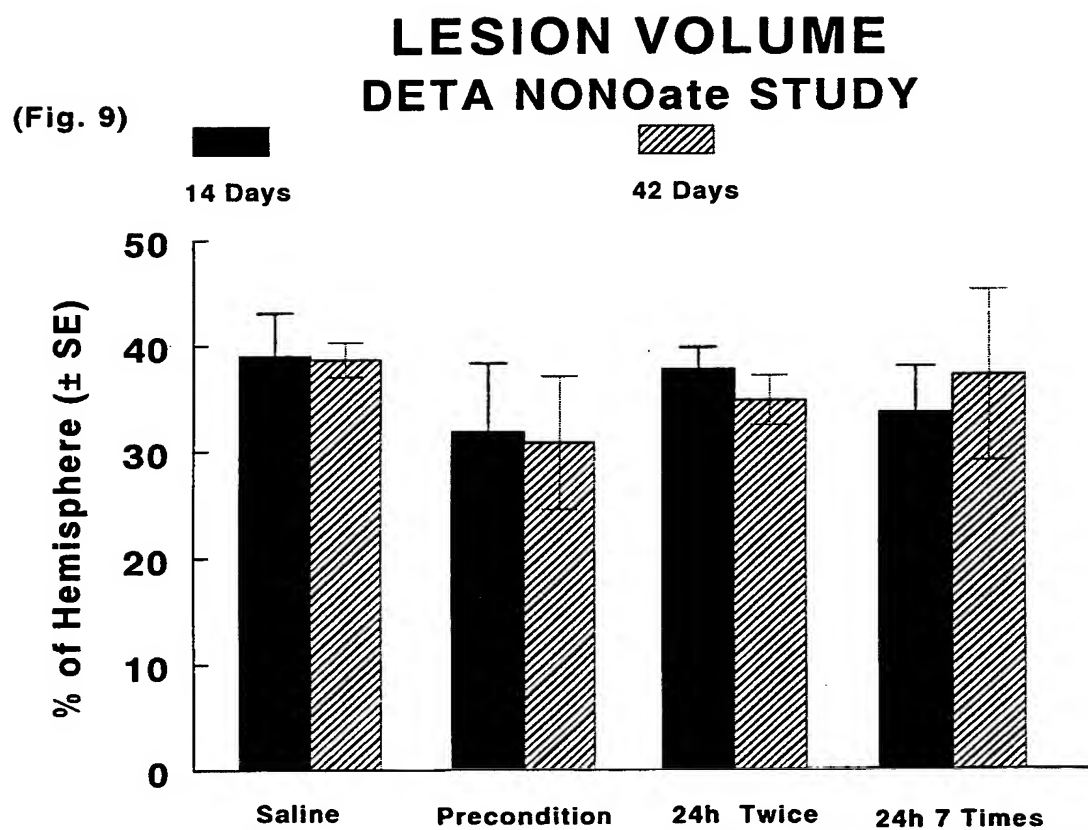
CELL PROLIFERATION in Dentate Gyrus DETA NONOate STUDY (14d)

(Fig 8a)



CELL PROLIFERATION in Dentate Gyrus DETA NONOate STUDY (42d)





Adhesive Removal Test

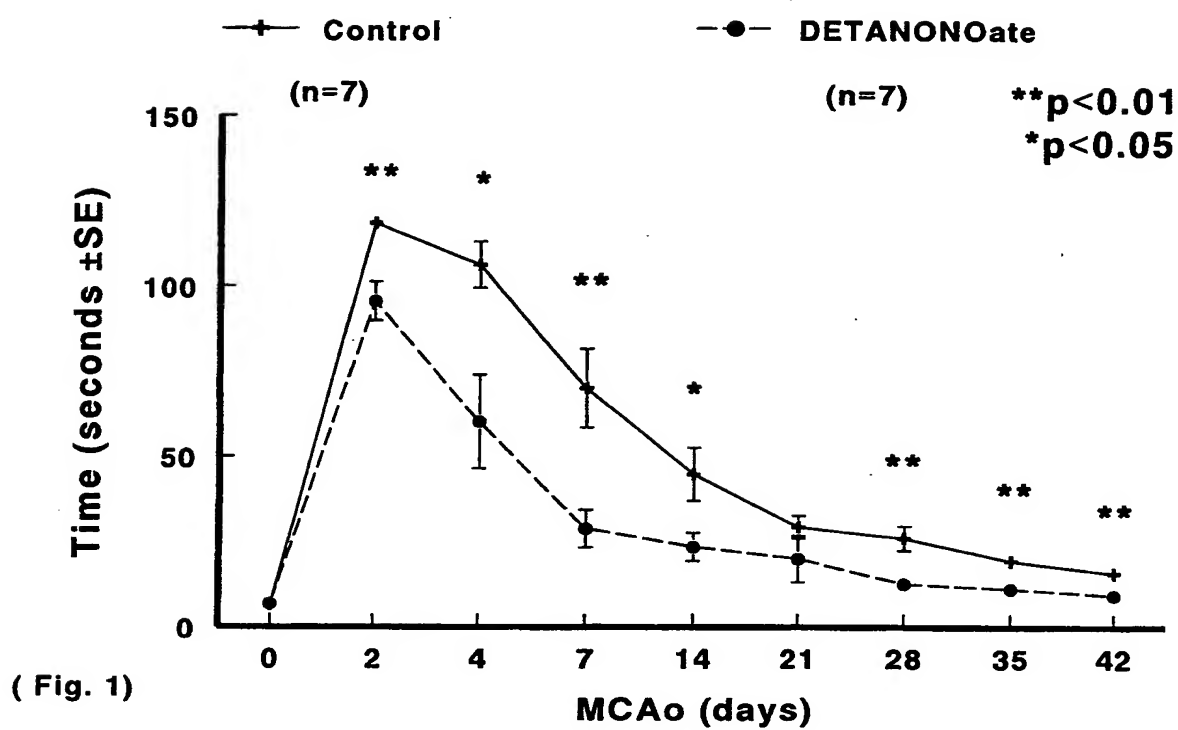


Fig 10

Rotarod Test

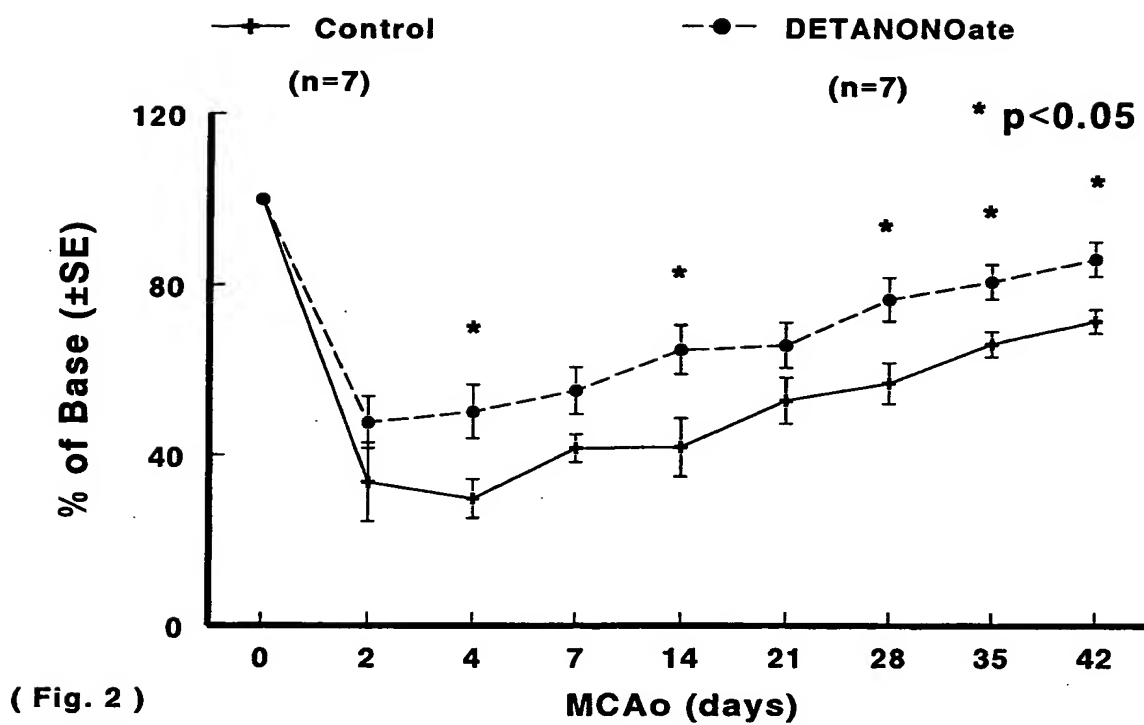


Fig 11

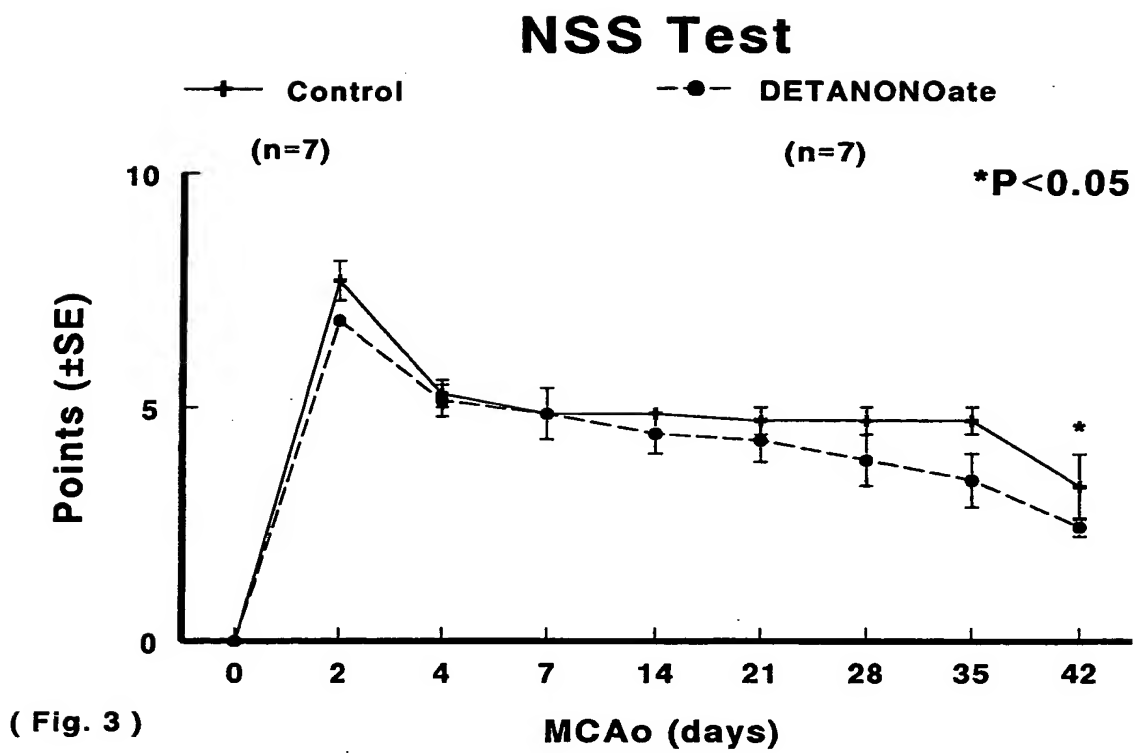
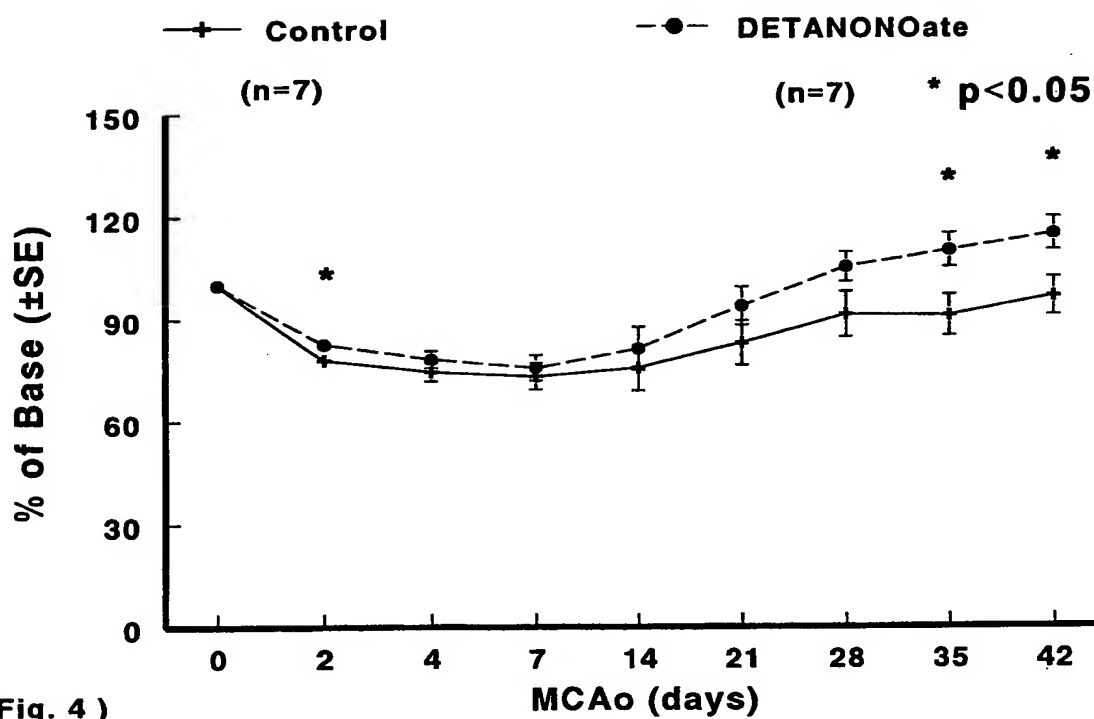


Fig 12

Weight %



(Fig. 4)

F. 5 13

Rotarod Test

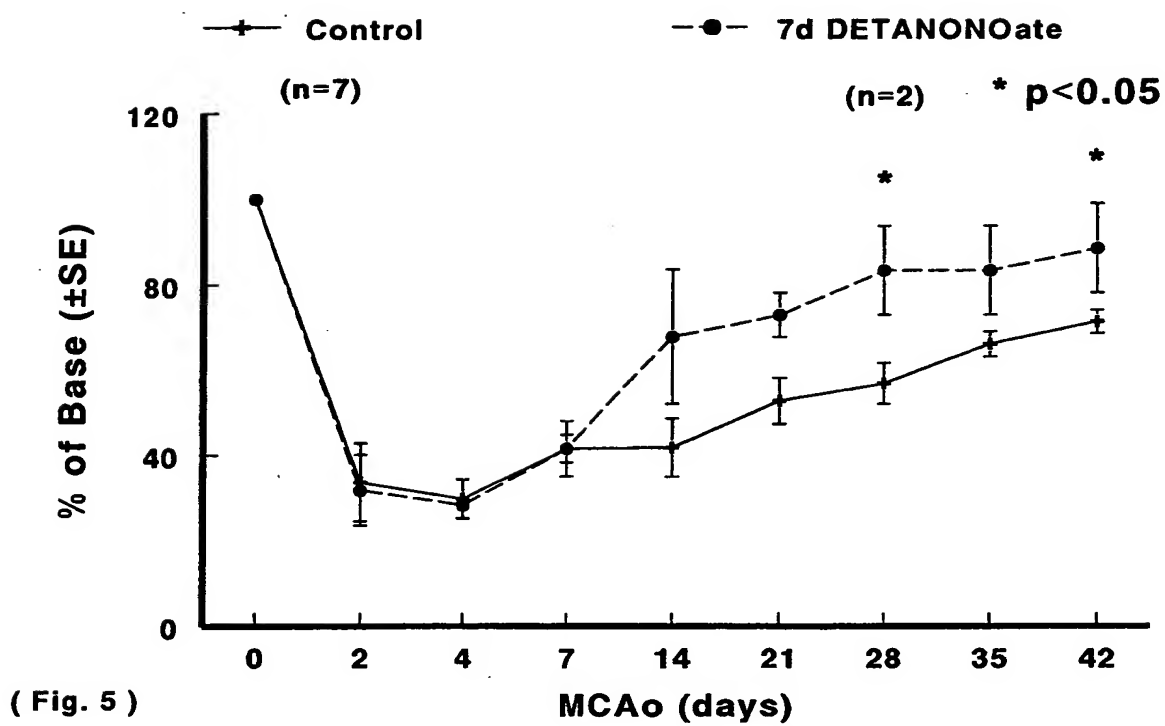


Fig 14

Rotarod Test

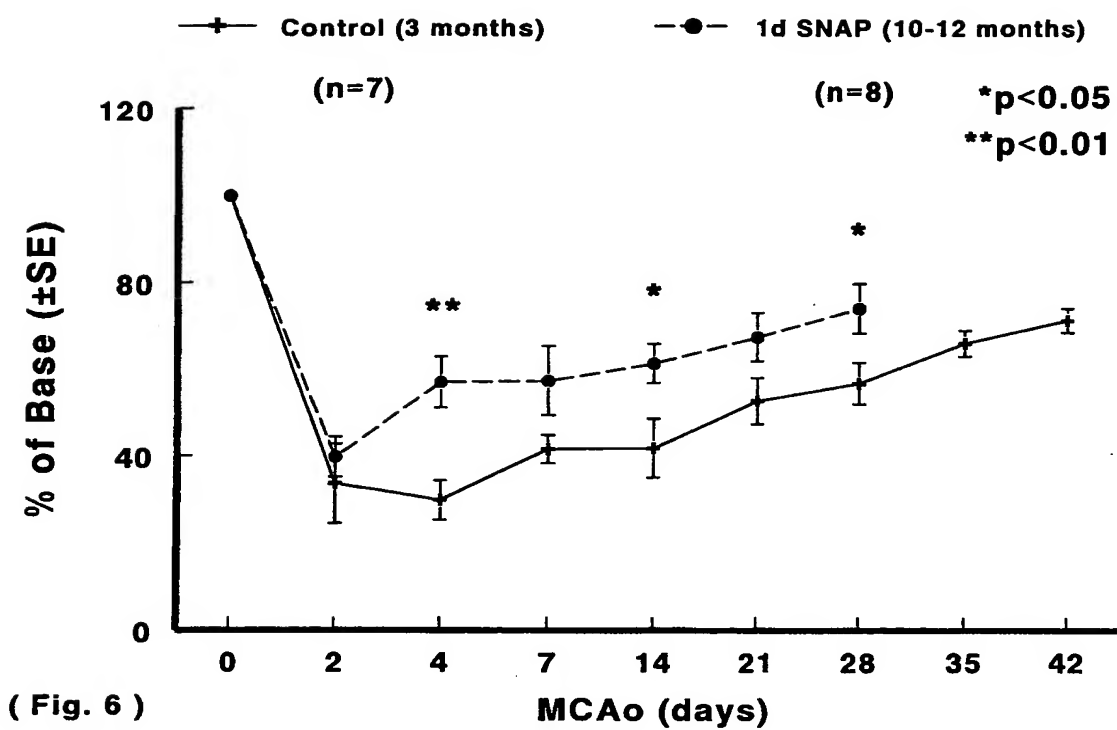
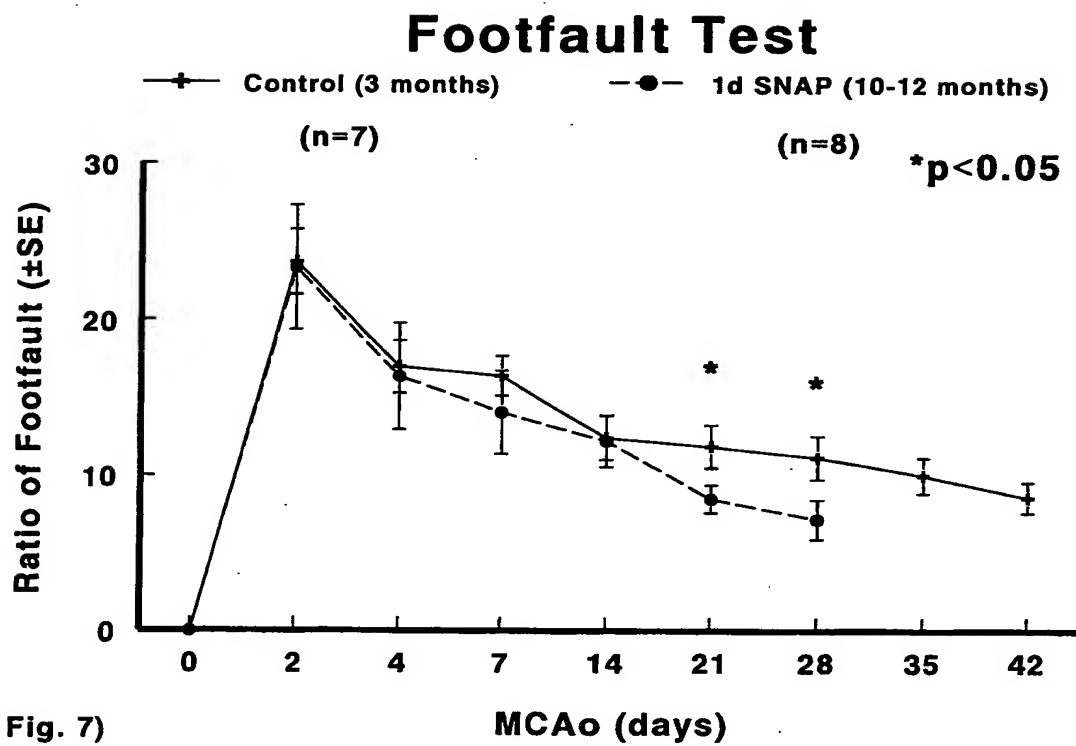


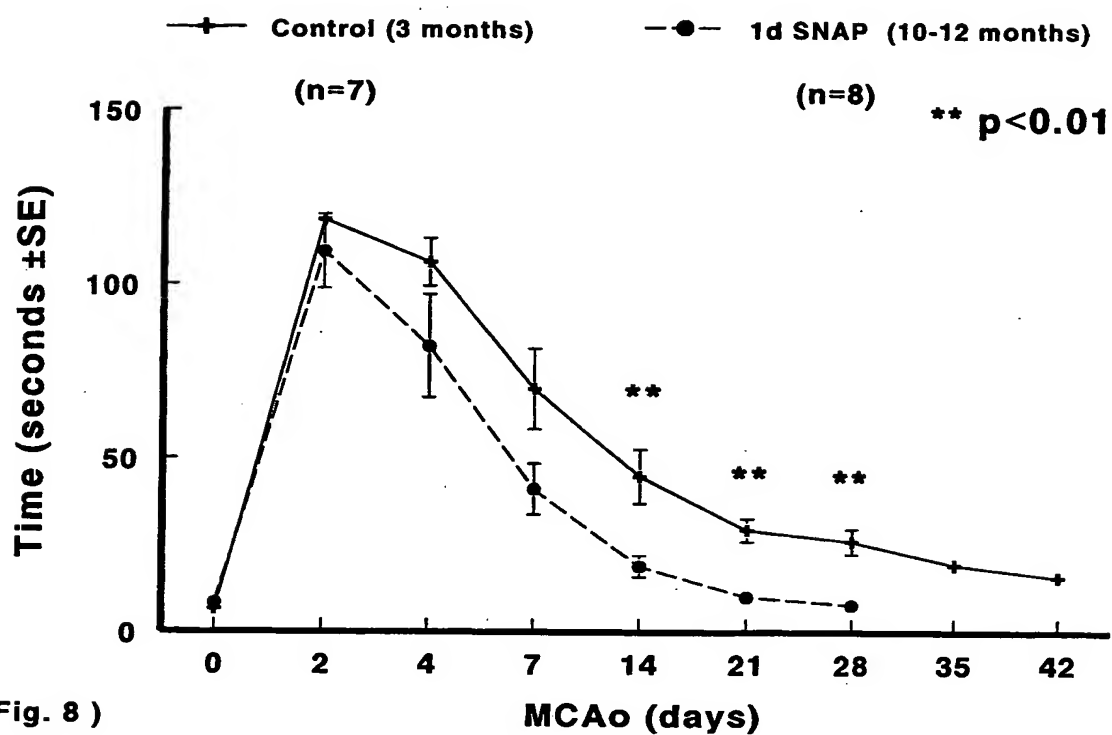
Fig 15



(Fig. 7)

Fig 12

Adhesive Removal Test



(Fig. 8)

Fig 17